SAFETY DATA SHEET



1. Identification

Product identifier THERMOLITH

Other means of identification

Brand Code 635A

Recommended use For Industrial Use Only

Recommended restrictions Avoid dry cutting, blasting, or dust generation.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HarbisonWalker International

Address 1305 Cherrington Parkway, Suite 100

Moon Township Pennsylvania 15108 US

Telephone General Phone: 412-375-6600

Websitewww.thinkHWl.comEmergency phone numberNot available.SupplierNot available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1
Carcinogenicity Category 1A
Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified.

Label elements





Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage. May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective

clothing/eye protection/face protection.

Response IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off

immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/doctor. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards None known.

Material name: THERMOLITH SDS CANADA

635A Version #: 01 Issue date: 05-18-2021

Supplemental information

Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

3. Composition/information on ingredients

Mixtures

Ingestion

media

Chemical name	Common name and synonyms	CAS number	%
CHROMIUM III COMPOUNDS		1308-31-2	80 - 100
Silicic Acid, Sodium Salt		1344-09-8	2.5 - 10
Kaolin		1332-58-7	1 - 2.5
SILICA, CRYSTALLINE, QUARTZ		14808-60-7	0.1 - 2.5
Other components below reportab		1 - 2.5	

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or Skin contact

poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and

delaved

blindness could result. Prolonged exposure may cause chronic effects. Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an

include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

Indication of immediate medical attention and special treatment needed

ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Use fire-extinguishing media appropriate for surrounding materials.

Not available.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters Not available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Material name: THERMOLITH SDS CANADA

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values Components	Туре	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Canada. Alberta OELs (Occupation	nal Health & Safety Code, Sche	dule 1, Table 2)	
Components	Туре	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles
Canada. British Columbia OELs. (0 Safety Regulation 296/97, as amen		for Chemical Substances, Oc	cupational Health and
Components	Туре	Value	Form
CHROMIUM III COMPOUNDS (CAS 1308-31-2)	TWA	0.05 mg/m3	Total
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Canada. Manitoba OELs (Reg. 217	/2006, The Workplace Safety A	nd Health Act)	
Components	Туре	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Canada. Ontario OELs. (Control of		mical Agents)	
Components	Туре	Value	Form
CHROMIUM III COMPOUNDS (CAS 1308-31-2)	TWA	0.05 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
Canada. Quebec OELs. (Ministry o Components	f Labor - Regulation respecting Type	g occupational health and sa Value	fety) Form
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable dust.
SILICA, CRYSTALLINE,	TWA	0.1 mg/m3	Respirable dust.
QUARTZ (CAS 14808-60-7)	1 **/ \	o. i mg/mo	respirable dust.
Canada. Saskatchewan OELs (Occ Components	cupational Health and Safety Ro Type	egulations, 1996, Table 21) Value	Form
CHROMIUM III COMPOUNDS (CAS	15 minute	1.5 mg/m3	

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Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) **Form** Components Value Type 0.5 mg/m3 8 hour Kaolin (CAS 1332-58-7) 15 minute 4 mg/m3 Respirable fraction. 8 hour 2 mg/m3 Respirable fraction. SILICA, CRYSTALLINE. 8 hour 0.05 mg/m3 Respirable fraction.

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Exposure guidelinesOccupational exposure to nuisance dust (total and respirable) and respirable crystalline silica

should be monitored and controlled. Occupational exposure to nuisance dust (total and respirable)

and respirable crystalline silica should be monitored and controlled.

Canada - British Columbia OELs: Skin designation

CHROMIUM III COMPOUNDS (CAS 1308-31-2)

Can be absorbed through the skin.

Appropriate engineering

QUARTZ (CAS 14808-60-7)

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.









General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.
Form Solid.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper Not a

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%)Not available.Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may

not be specific to industrial application exposure.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contactCauses severe skin burns.Eye contactCauses serious eye damage.IngestionCauses digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

ACGIH sensitization

TRIVALENT CHROMIUM WATER SOLUBLE Dermal sensitization

INORGANIC COMPOUNDS, INCLUDING CHROMITE

ORE PROCESSING, AS CR (III), INHALABLE

FRACTION (CAS 1308-31-2)

Respiratory sensitization

Canada - Alberta OELs: Irritant

CHROMIUM III COMPOUNDS (CAS 1308-31-2) Irritant

Canada - Manitoba OELs Hazard: Dermal sensitization

CHROMIUM III COMPOUNDS (CAS 1308-31-2)

Dermal sensitization

Canada - Manitoba OELs Hazard: Respiratory sensitization

CHROMIUM III COMPOUNDS (CAS 1308-31-2) Respiratory sensitization

Respiratory sensitization Not a respiratory sensitizer.

Material name: THERMOLITH SDS CANADA

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica Carcinogenicity inhaled from occupational sources can cause lung cancer in humans. However in making the

> overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is

> sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer

risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and

respirable crystalline silica should be monitored and controlled.

ACGIH Carcinogens

Kaolin (CAS 1332-58-7) A4 Not classifiable as a human carcinogen.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) A2 Suspected human carcinogen.

Canada - Alberta OELs: Carcinogen category

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

Kaolin (CAS 1332-58-7) Not classifiable as a human carcinogen.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category

CHROMIUM III COMPOUNDS (CAS 1308-31-2) Detected carcinogenic effect in humans. Suspected carcinogenic effect in humans. SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

IARC Monographs. Overall Evaluation of Carcinogenicity

CHROMIUM III COMPOUNDS (CAS 1308-31-2) 3 Not classifiable as to carcinogenicity to humans.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Developmental effects

SILICA, CRYSTALLINE, QUARTZ 0 **Developmental effects - EU category** SILICA, CRYSTALLINE, QUARTZ 0 **Embryotoxicity** SILICA, CRYSTALLINE, QUARTZ 0

Reproductivity

0 SILICA, CRYSTALLINE, QUARTZ

Specific target organ toxicity -Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Not an aspiration hazard. **Aspiration hazard**

Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be **Chronic effects**

harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

6/8

No data is available on the degradability of any ingredients in the mixture. Persistence and degradability

Bioaccumulative potential No data available. Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

Material name: THERMOLITH SDS CANADA

13. Disposal considerations

Disposal instructionsThis product, in its present state, when discarded or disposed of, is not a hazardous waste

according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria

for hazardous waste.

Hazardous waste code Since this product is used in several industries, no Waste Code can be provided by the supplier.

The Waste Code should be determined in arrangement with your waste disposal partner or the

responsible authority.

Waste from residues / unused

products

Not available.

Contaminated packaging Not available.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS

contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

CHROMIUM III COMPOUNDS (CAS 1308-31-2)

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

Material name: THERMOLITH SDS CANADA

Country(s) or regionInventory nameOn inventory (yes/no)*JapanInventory of Existing and New Chemical Substances (ENCS)NoKoreaExisting Chemicals List (ECL)YesNew ZealandNew Zealand InventoryYes

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

No

16. Other information

Issue date 05-18-2021

Version # 01

Disclaimer This information is based on our present knowledge on creation date. However, this shall not

constitute a guarantee for any specific product features and shall not establish a legally valid

contractual relationship.

Revision information Product and Company Identification: Product and Company Identification

Toxicological Information: Toxicological Data

Ecological Information: Ecotoxicity

Transport Information: Material Transportation Information

Material name: THERMOLITH SDS CANADA

Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).